

AIRNow National Air Quality Notification and Forecasting System



Health Effects of Air Pollution



Air pollution affects everybody

Aggravates

- lung disease including asthma
- heart disease including congestive heart failure

Resulting in:

- More premature deaths
- More admissions to hospitals
- More trips to emergency rooms
- More visits to doctors' offices
- More school and work absences
- More symptom days



Health Effects of Air Pollution



Air pollution affects human health, the environment, and has economic impacts¹

Each year in the United States:

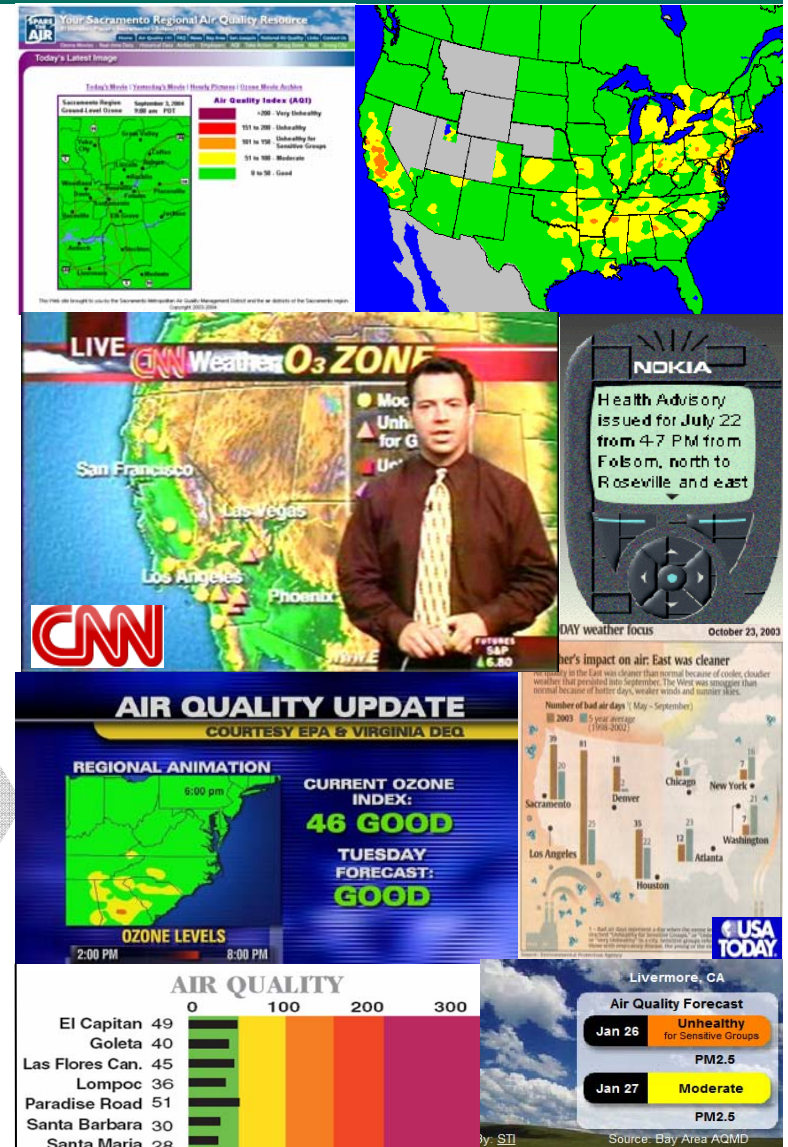
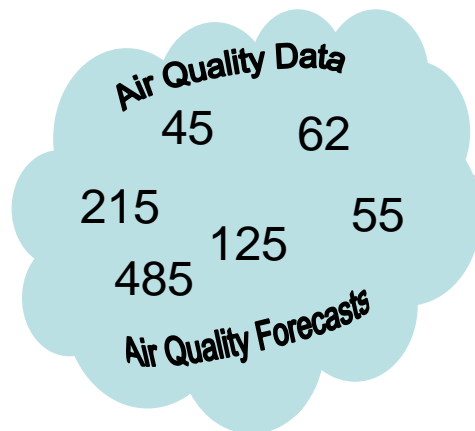
- Human exposure to outdoor air pollution costs between \$40 to \$50 billion.
- 50,000 to 120,000 premature deaths are associated with exposure to air pollutants.
- People with asthma experience more than 100 million days of restricted activity, costs for asthma exceed \$4 billion, and about 4,000 people die of asthma.

¹ National Center for Health Statistics. Healthy People 2000 Final Review. Hyattsville, Maryland: Public Health Service. 2001. Library of Congress Catalog Card Number 76-641496

About AIRNow

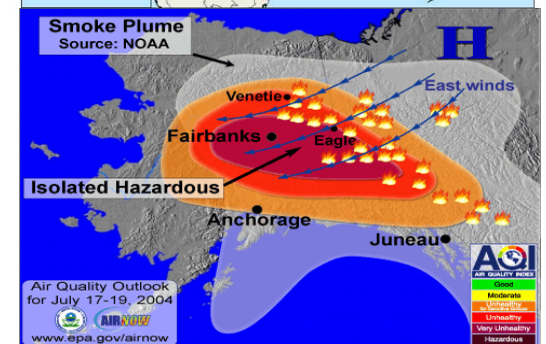
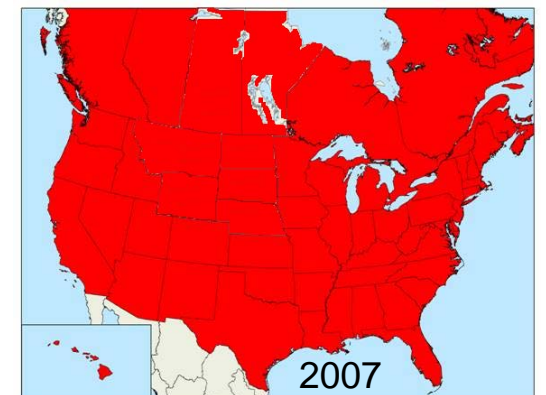
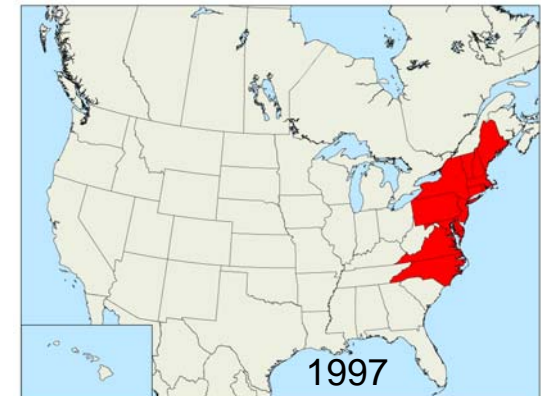
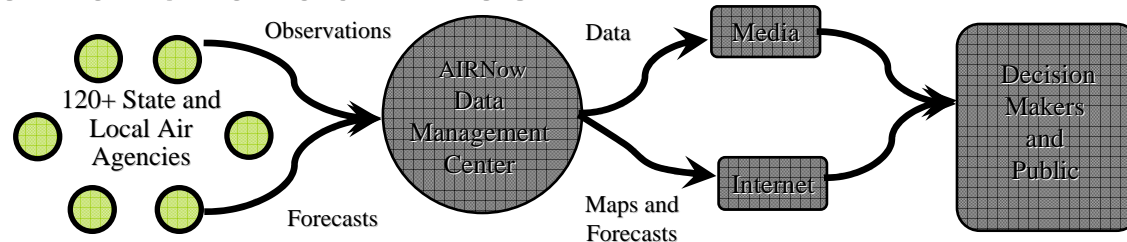
What AIRNow does

- Coordination
- Centralization
- AQI conversion
- Education
- Distribution



About AIRNow

- Began in 1997
- Funded by U.S. EPA
- Diverse stakeholder community
 - Federal, state, provincial, tribal and local air agencies (120+)
 - Scientific and health research organizations (15+)
 - Media and public outreach groups (30+)
- Education and outreach
- Substantial growth and data exchange
- International activities



Information → Action → Better Health

Health Protection

AirAlert email notification system

Actions soccer coaches took:

"I help to manage a youth soccer league of over 1000 players. We need to ensure that our children are participating in a healthy environment."

"I coach a kid's soccer team and don't want them to practice if ozone levels are too high"

"I coach Youth Soccer and try not to have strenuous practice sessions on bad days"



"We make adjustments in outdoor sports activities during air quality episodes (cancel soccer practices when AQI exceeds certain levels)."

"I coach a boys soccer team and we cancelled practice when AQI was at or above 100."



Information → Action → Better Health



Emission reductions

- “Spare The Air” days
- Ask public to take action (drive less)
- Evaluation (2002-2004)
 - 15% of motorists drove less
 - Reduced ozone-forming emissions by 1.2 tons per day
 - Reduced greenhouse gas emissions by about 1 ton per day



Information → Action → Better Health

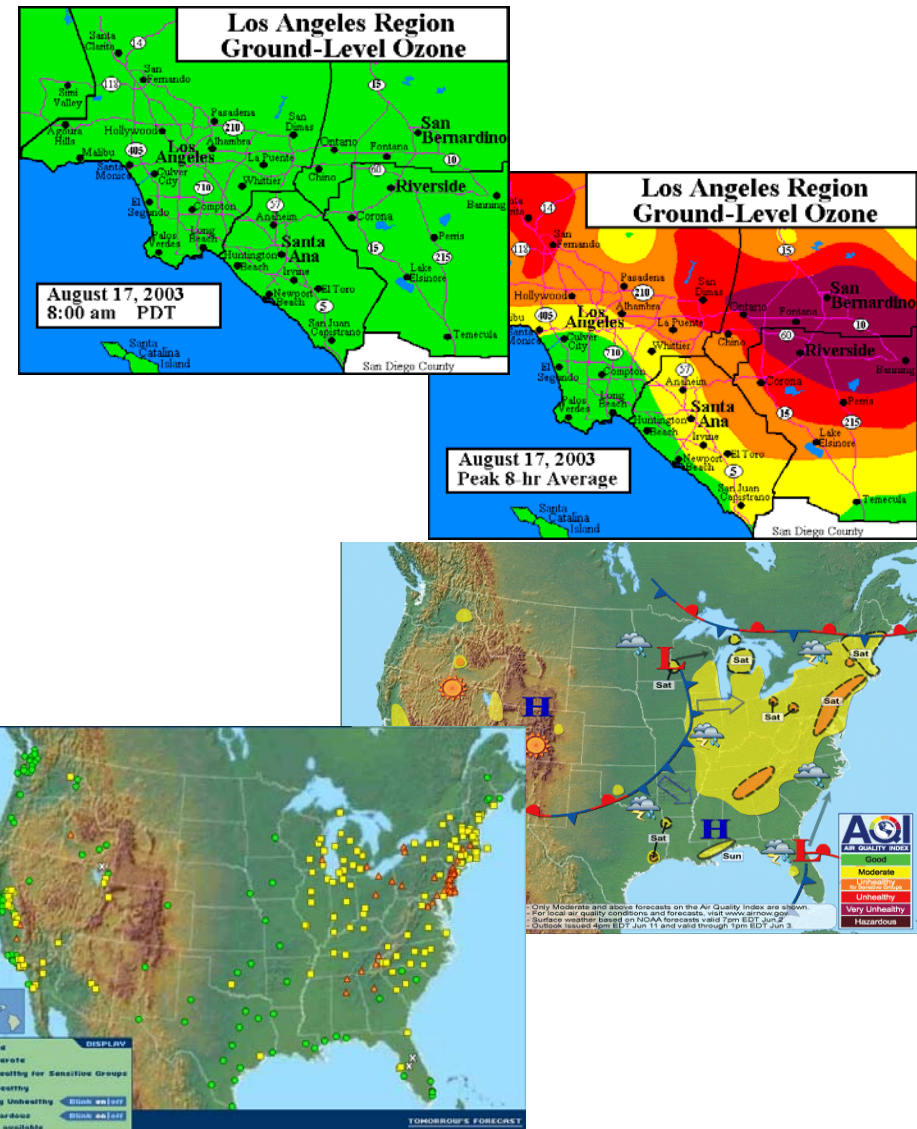
Economic savings

- Two groups of asthmatics
- 5-month summertime study
- With and without cellular notifications of air quality forecasts
- Informed group saved \$450 in medicine costs



AIRNow Products

- Real-time (hourly) data
- Forecasts (300 cities)
- National outlooks (daily)
- News stories
- Web cams (air quality)
- Air comparisons



Why use AIRNow data?

“An increase in public awareness of environmental health issues is key to public health advances..... Improving the availability of environmental health data will impact on continued improvement for the environmental health objectives.”

Healthy People 2000 report

